

Questions and Answers

Q How do you do your gage factor calibration?

A On a NAS-942 gage factor bar.

Q How do you attach the gage to it so you can reuse the gage?

A A gage factor calibration is not conducted on each gage. The gage factor calibration procedure is, as with any other strain gage, done on a group of gages.

C But you mention the calibration of gage factor...

C (Hitec Products) No, we run a NAS-942, but it is just a representation of the lot with the same configuration as the actual gage.

One other item is that Hitec Products has some instrumentation available to run a "live" calibration. It will run an apparent strain, and shows how flat the apparent strain is on this gage.

Q How high a temperature can you attain?

A The gage will go to 550°C, which is about 1025°F.

Q What kind of substrate do you have to bond it on?

A Hitec Products usually bonds it on super-alloys or chrome-moly steel that is used in power plants or on structural steels. However, the gage is also available on titanium. There are various alloy options. One is 5-mil-thick titanium-6 aluminum 4 vanadium, which is a very common high strength titanium. There is pure titanium 3 mils thick, which is used for strapping. When putting a gage on titanium, it is suggested to route the leads and straps with titanium, which can be welded very nicely.

Q Will it work on graphites?

A Cement is available for that, but no strap welding of any kind. The gage can be attached to graphite, especially pure graphite. If it is a pure graphite, there would not be much of a problem.

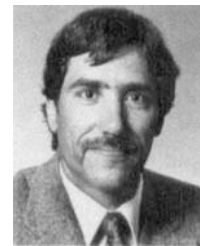
Q Will it attach to carbon carbons?

A Yes



A JOINT SEM PRESIDENT'S CORNER

by T. Dixon Dudderar and
Mark E. Tuttle



Dixon promised in his May/June 1995 President's Corner that a future editorial would be devoted to the Society's most popular journal, *Experimental Techniques* (E/T). Since neither Dixon nor Mark ever break a promise (although we've been known to miss a deadline or two), here is that editorial, albeit a few months later than originally planned.

E/T has evolved from a 4-page quarterly newsletter in 1976 to the present bi-monthly publication received by all SEM members, and it's editorial mission has remained consistent. Specifically, the technical focus of E/T is on *experimental methods*, rather than on experimental results or the interpretation thereof. This emphasis on experimental *technique* rather than experimental results or theory clearly distinguishes E/T from the Society's two other publications, *Experimental Mechanics* and *Modal Analysis*. In addition, E/T includes extensive coverage of Society activities, a comprehensive calendar of events, announcements describing the achievements of SEM members, book and software reviews, announcements of new products of interest to the experimental mechanics community, interesting editorials like the one you are reading, and informative advertising by well-respected vendors. On this last point, keep in mind that E/T serves as a very important medium in which 1) those of us who provide equipment and services to the experimental mechanics community can describe their wares, and as a result, 2) the rest of us who use such services and equipment can efficiently locate them. We urge you to avail yourself of the expertise and products advertised in E/T when the need arises.

Naturally, we look for E/T's continued success in all of these areas. We also wish to re-emphasize the editorial mission of E/T: to provide a forum for practicing experimental mechanician. We invite all members of the technical community, and you in particular, to consider preparing and submitting an article to E/T. You need not be a college professor or a Ph.D. research scientist to submit a good, practical article to E/T. All you need is your experimental mechanics experience, a good idea that you know is effective, and the willingness to

share it with others. Your article need not be more than one or two pages long, and in fact, the maximum length is 10 double-spaced typewritten pages, including all text, tables, references, etc. You need not include a lengthy introduction or discussion, extensive references, or even new experimental "results" - generally, experimental data should only be included to demonstrate the validity of the experimental method you describe. Once you've prepared your contribution, send three copies to the current E/T Senior Technical Editor at the following address:

Prof. Ibrahim Miskioglu
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Of course, we do not guarantee that every article submitted will be published in E/T. However, we do guarantee that every submission will be gratefully acknowledged and carefully evaluated by the E/T Technical Editors and their teams of reviewers. We also try to provide a relatively quick publication schedule; a submittal which does not require extensive editing or re-review is usually published 9-16 months after initial submittal.

Once again, we invite you to submit an article. If you don't make the effort, few may ever have the chance to make use of the good ideas and practical knowledge you have gained during the course of your career.

- Dr. Mark E. Tuttle
1995-1996 SEM President
- Dr. T. Dixon Dudderar
1994-1995 SEM President

P.S. For a more detailed review of *Experimental Technique's* evolution, we invite you to view the **ETCetera** column in this issue.